

SONY®

3-798-752-21 (1)

# FM/AM Compact Disc Player

Operating Instructions \_\_\_\_\_ **EN**  
Mode d'emploi \_\_\_\_\_ **F**

## Owner's Record

The model and serial numbers are located on the bottom of the unit.  
Record the serial number in the space provided below.  
Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CDX-C490 Serial No. \_\_\_\_\_

For installation and connections, see the supplied installation/connections manual.  
En ce qui concerne l'installation et les connexions, consultez le manuel d'installation/connexions fourni.



CDX-C490

Model No. CDX-C490 Serial No. \_\_\_\_\_

Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

CAUTION

The use of optical instruments with this product will increase eye hazard

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## Features

### General

- **Detachable-front panel** enables you to take the front panel away with you when you leave your car (page 5).
- **Caution alarm** will be activated if you turn off the ignition key without removing the front panel from the unit.
- Provided with a **digital 12-hour clock** (page 6).
- Switchable **two color (amber and green) illumination** (page 15).
- **Telephone-mute function** for decreasing the volume automatically with a telephone call.
- **Built-in power amplifier (max. output: 30 W × 4 ch)** enables you to enjoy a 4-speaker system.
- Line outputs for connecting an optional power amplifier.
- Supplied with **the rotary commander** which can be operated like a wiper or headlight switch of your car while driving.
- Optional **the wireless remote commander (RM-X40)** can be used.

### CD player section

- 1 bit DAC (Digital-to-Analog Converter) for a clear sound reproduction.
- **Quick recovery mechanism** for preventing sound skipping.
- Convenient functions such as the **Intro Scan Function** for searching a desired track, the **Repeat Play Function** for playing a track repeatedly, and the **Shuffle Play Function** for playing tracks in random order can be used.
- **Program memory function** for preselecting your favourite tracks from the discs in the changer, and playing them back in the order you want to hear them (page 8).

### Tuner section

- Up to 30 stations can be preset: 20 stations on FM and 10 stations on **AM**.
- **BTM (Best Tuning Memory) function** automatically searches and stores the stations with the strongest signals on the preset number buttons in order of frequency (page 12).
- **Station memo function** for displaying the names of the radio stations stored in the memory (page 13).

### CD/MD changer control section (when the optional Sony CD/MD changer(s) is(are) connected)

- Several Sony CD changers (not supplied) and Sony MD changers (not supplied) can be connected and controlled with the unit by using the Sony source selector(s) (not supplied).
- Convenient functions such as the **Intro Scan Function** for searching a desired track, the **Repeat Play Functions** for playing a track repeatedly, and the **Shuffle Play Functions** for playing tracks in random order can be used.
- **List up function** for displaying the names of the discs in the changer in order.
- **Program memory function**<sup>\*1</sup> for preselecting your favourite tracks from the discs in the changer, and playing them back in the order you want to hear them (page 8).
- **Custom file function**<sup>\*2</sup> for displaying the title of each disc and setting a PLAY/SKIP mode on each track (page 19).

<sup>\*1</sup> When the optional CD changer(s) with program memory function is(are) connected.

<sup>\*2</sup> When the optional CD changer(s) with custom file function is(are) connected.

# Precautions

- Before operating the unit for the first time or after replacing the car battery, press the reset button with a ball-point pen etc., and then start operating the unit. Pressing the reset button will erase the memorized program and clear the memory of the CD program memory function.

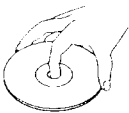


Reset button

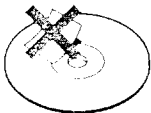
- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before operating it.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of a 2-speaker system, set the fader control to the center position.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

## Notes on CD



A dirty or defective disc may cause sound dropouts in playing. To enjoy optimum sound, handle the disc as follows. Handle the disc by its edge, and to keep the disc clean, do not touch the surface.



Do not stick paper or tape on the labeled surface



Do not expose the discs to direct sunlight or heat sources such as hot air-ducts, or leave them in a car parked in direct sunlight where there can be a considerable rise in the temperature inside the car.



Before playing, clean the discs with an optional cleaning cloth. Wipe each disc from the centre of the disc outward. Do not use solvents such as benzine, thinner, commercially available cleaners or antistatic spray intended for analog discs.

## Notes on Moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the CD player. Should this occur, the unit will not operate properly. In this case, remove the disc and wait for about an hour until the moisture has evaporated.

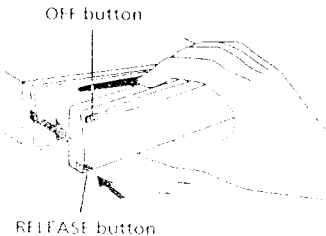
EN

# Detaching and Attaching the Front Panel

The front panel of this unit can be detached in order to prevent the unit from being stolen.

## Detaching the Front Panel

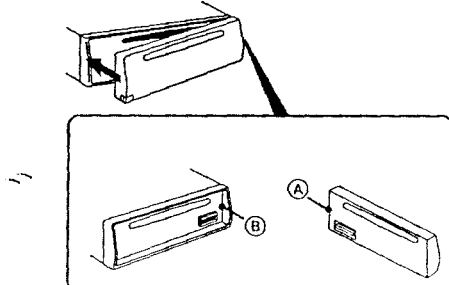
Before detaching the front panel, be sure to press the OFF button first. Then press the RELEASE button to open up the front panel and detach the panel by pulling it towards you as illustrated.



Be sure not to drop the panel when detaching it from the unit.

## Attaching the Front Panel

Apply the right hand side of the front panel to the unit by attaching part ④ of the front panel to part ③ of the unit as illustrated and push unit it until clicks.



### Notes

- Make sure that the front panel is the right way up when attaching it to the unit as it cannot be attached upside down.
- Do not press the front panel hard against the unit when attaching it to the unit. It can easily be attached by pressing it lightly against the unit.
- When you carry the front panel with you, put it in the supplied front panel case.
- Do not press hard or give excessive pressure to the display windows of the front panel.
- Before removing the front panel, be sure to turn the power off. However, if you press the RELEASE button to detach the panel while the unit is still turned on, the power will be automatically turned off in order to protect the speakers from being damaged.
- Do not expose the front panel to direct sunlight, heat sources such as hot air ducts or leave it in a humid place. Never leave it on the dashboard etc. of a car parked in direct sunlight where there may be a considerable rise in temperature inside the car.

## Caution Alarm

If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will be activated and a beep tone will be heard for a few seconds (only when the POWER SELECT switch is set to the ④ position).

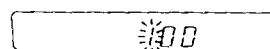
## Setting the Clock

The clock has a 12-hour digital indication.

For example, setting it to 10:08

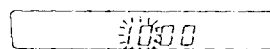
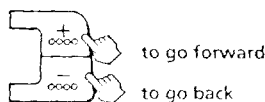
**1 Display the time.**  
(Press the OFF or the <sup>DISP</sup> button during the unit operation.)

**2 Press the <sup>DISP</sup> button for more than two seconds.**

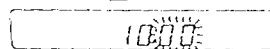


The hour digit blinks

Set the hour digits.

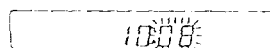
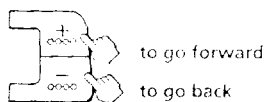


**3 Press the <sup>α</sup> button momentarily.**

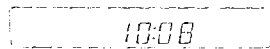


The minute digit blinks

Set the minute digits.



**4 Press the <sup>Ⓢ</sup> button momentarily.**



The clock activates

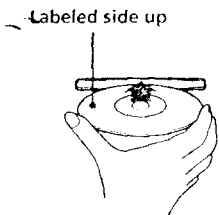
### Note

When the POWER SELECT switch on the bottom of the unit is set to the ④ position, the clock cannot be set unless the power is turned on. Set the clock after the unit has been turned on to avoid a distorted CD playback.

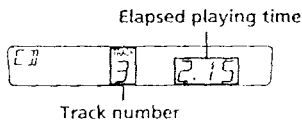
# CD Player Operation

## Playing a CD

After inserting the CD, playback will start from the first track automatically.



If a CD is already inserted, press the button to start playback.



When the last track on the CD is over

the track number indication will return to "1", and the playback will restart from the first track of the CD.

**Note**  
To play a 8 cm CD, use the optional Sony compact disc single adapter (CSA-8).

To stop playback, eject the CD by pressing the button or press the button. Playback stops also when you select another source (radio or MD) by pressing the or button.

## Ejecting the CD

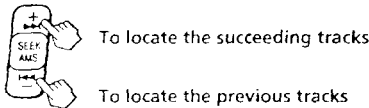
Press the button.

**Note**  
If you leave the ejected disc in the disc insertion slot after you have pressed the button, the disc will be automatically reloaded into the slot after about 1 second in order to protect it.

## Locating the Beginnings of the Tracks

— AMS (Automatic Music Sensor) Function

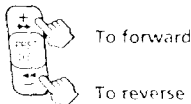
During playback, press either side of the SEEK/AMS button the number of times you wish to skip the tracks.



## Locating the Desired Part a Track

— Manual Search Function

During playback, press and hold either side of the PRST/DISC button. Release the button when you have found the desired part.



If you reverse to the beginning of the track "L L L L" appears on the display. Forwarding to the end of the track causes "R R R R" to be displayed. In either case, you can neither proceed to the previous nor following track.

## Searching the Desired Track

— Intro Scan Function

Press the button during playback. → "INTRO" appears on the display. The first 10 seconds of all the tracks are played. When you find the desired track, press the button once more. The unit returns to the normal playback mode.

EN  
CD Player Operation

**Playing Tracks Repeatedly**  
— Repeat Play Function

Press the  button during playback.  
→ "REP 1" appears on the display.  
When the currently played track is over, it will be played again from the beginning.  
To cancel this mode, press the button again.

**Playing Tracks in Random Order**  
— Shuffle Play Function

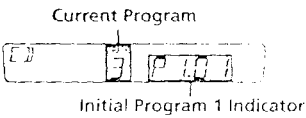
Press the  button during playback.  
→ "SHUF 1" appears on the display.  
All tracks on the currently selected disc are played in random order. After each track has been played once.

**CD Program Memory Function**

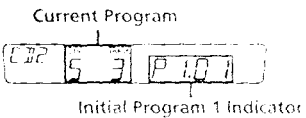
You can preselect the tracks you want to hear and the order in which you want them to be played back (from the discs in the changer connected to the unit). This function is divided into Program 1 and Program 2, each allowing you to preselect up to 12 tracks. Furthermore, once a program is registered, the track order is preserved. Changing the disc order in the changer will not affect the order in which the tracks have been set for playback.

- Note**
- This function works only when this unit or CD changers with program memory function are connected.
  - When a CD changer without program memory function is connected, pressing the PGM button for more than two seconds will not cause the system to enter the program edit mode. Instead, "SORRY" will appear in the display.
  - If you press the DSPL button momentarily when the program edit mode is engaged, the disc number, track number, and elapsed playing time of the currently played track will be displayed for one second.
  - If you press the CD/MD, PRST/DISC and SEEK/AMS buttons when the program edit mode is engaged, the selected disc number and track number, and the elapsed playing time will be displayed for 1.5 seconds.

Without CD changer connected:

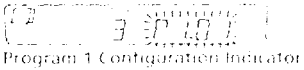


CD changer with program memory function connected:



**Configuring a Program**  
(with tracks you want to hear)

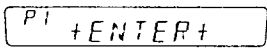
- 1 Press the  button for more than two seconds.  
The system will enter the program edit mode.

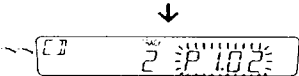


To configure Program 2, press the  button again, momentarily.

2 Play the track that you wish to enter into memory.

3 Press the  button momentarily.





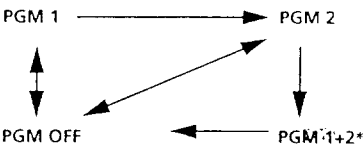
4 ① To continue entering tracks, repeat steps 2 and 3.

② To return to the normal playback mode, press the  button for more than two seconds.

**Notes**

- Configuration has been completed but the program will not play.
- “\*\*\*WAIT\*\*\*” appears on the display when the input track’s data has not yet been read into the memory, or when a disc has not been put into the unit.
- “\*\*\*FULL\*\*\*” appears on the display when you try to input more than 12 tracks into a program at one time.

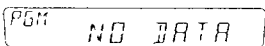
The function of the  button changes cyclically as follows:



\* Only when tracks are programmed into both “PGM 1” and “PGM 2”, “PGM 1+2” will be displayed.

**Note**

If a program has not been configured, it will not appear on the display.



Furthermore, if neither Program 1 nor Program 2 have been input in memory, “NO DATA” will appear on the display.

**Notes**

- If a track stored into program memory is not contained in the disc magazine, this track will be skipped and the next track will be played.
- If the information about a track stored into program memory has not been loaded yet, this track will not be played.
- When the disc magazine in the CD contains not a single track stored into program memory, or when information about program memory stored tracks has not been loaded yet, “NO KEYP” will be displayed.

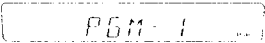
## Playing an Arranged Program

By pressing the  button momentarily you can designate the program(s) you wish to play.

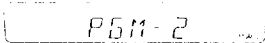
The program will begin playing two seconds later.

If you press either side of the PRST/DISC button during program memory play, program memory play will be interrupted, and playback of the selected disc starts.

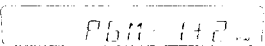
Program 1 Playback



Program 2 Playback



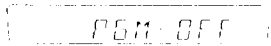
Program 1 and 2 Playback



## Cancelling from Program Mode

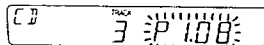
Press the  button momentarily during Program Mode playback.  
→ “PGM OFF” appears on the display.

Once the Program Mode has been cancelled, the unit returns to normal playback mode.



## Erasing Input Tracks

- 1 Press the button for more than two seconds.  
The unit will enter the program edit mode.



Program 1 Configuration Indicator

To erase tracks in Program 2, press the button momentarily to prompt the Program 2 Configuration Indicator.

### Notes

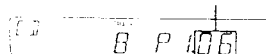
- When entering Program Edit Mode from Program Memory Playback Mode, the slot number of the track currently playing will appear on the display.
- Entering Program Edit Mode from Normal Playback Mode

When all 12 track slots are filled in the program, the number 12 appears on the display.  
When less than 12 tracks have been filled, the number of the first available slot appears on the display. For example, if only 7 tracks have been input, the number 8 will appear on the display.

- 2 Press the or button to designate which track you wish to erase (shown on the display).

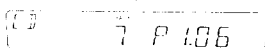
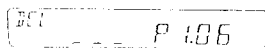
The track currently registered in the 6 slot of Program 1.

The track slot number



- 3 Once designated, press the button for more than two seconds. The track will be erased.

New track in slot 6



Once the track in the 6 slot has been erased, tracks in the 7-12 slots will move up one slot.

### Note

In the case of a full 12 track slots in the program, deleting one track causes the 12 slot to become empty and another slot becomes vacant.

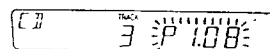
- 4 To continue erasing tracks, repeat steps 2 and 3.

- 5 To finish erasing tracks, press the button for more than two seconds.

## Inserting Tracks into a Program

- 1 Press the button for more than two seconds.

The system will enter the program edit mode.

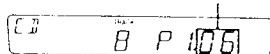


Program 1 Configuration Indicator

If you wish to insert tracks into Program 2, prompt the Program 2 Configuration Indicator by pressing the PGM button momentarily.

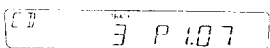
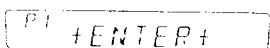
- 2 Press the or button to designate to which track slot number you wish to insert a track.

The track slot number



- 3 Play the track you wish to insert.

- 4 Press the button momentarily to enter the track.



The newly entered track will fill the 6 track slot, and tracks 7 and up will move down one slot.

### Note

Once all 12 slots have been filled, "FULL" will appear on the display, and it will not be possible to insert more tracks.

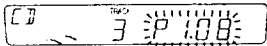
- 5 (A) To continue inserting tracks into the program, repeat steps 2 through 4.

- (B) To finish inserting tracks, press the button for more than two seconds.

# Erasing a Program Completely

For example, to delete Program 1.

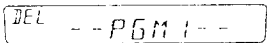
- 1 Press the  button for more than two seconds.  
The system will enter the program edit mode.



Program 1 Configuration Indicator

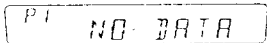
To delete Program 2, press the PGM button once, momentarily.

- 2 Press the  button to get following indication.



If no track is stored into PGM 1, this indication will not appear.

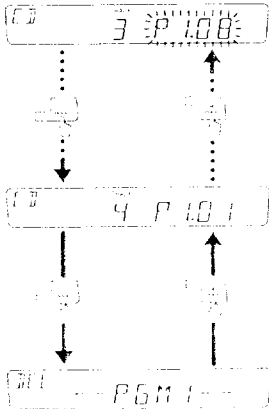
- 3 Press the  button for more than two seconds.



One second after "NO DATA" appeared on the display, the program edit mode for PROGRAM 1 will be displayed

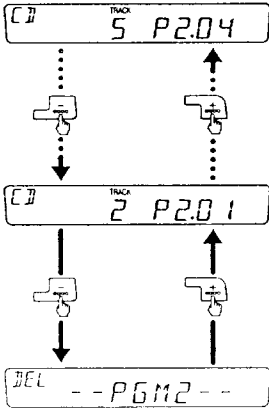
The function of the buttons changes cyclically as follows:

## Program 1 group



Press the  button when any of above indications is displayed, the display will change to PROGRAM 2.

## Program 2 group



Press the  button when any of above indications is displayed, the display will change to PROGRAM 1.

Note  
If a program has not been configured, it will not appear on the display

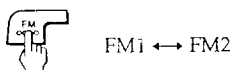
- 4 To finish erasing programs, press the  button for more than two seconds.

## Radio Reception

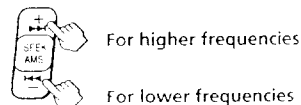
### Searching for the Stations Automatically

— Automatic Tuning

- 1 Select the desired band.



- 2 Press either side of the SEEK/AMS button to search for the station (automatic tuning).



The scanning stops when a station is received. Press either side of the SEEK/AMS button repeatedly until the desired station is received.

When an FM stereo program with a sufficient signal strength is tuned in,



the "ST" indication will appear.

To avoid the automatic tuning from stopping on stations too frequently (local seek mode), press the button momentarily to get the "LCL" indication.

Only the stations with relatively strong signals can be tuned in. The local seek mode functions only when the automatic tuning is in operation.

### If FM Stereo Reception is Poor — Monaural Mode

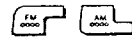
Press the button momentarily.  
→ "MONO" appears on the display.  
The sound will improve, but it will be monoaural.

By pressing the button, you can change the displayed items as follows:

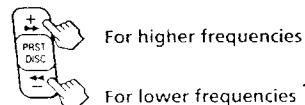
→ LCL → MONO → Normal mode

### Tuning in by Adjusting the Frequency — Manual Tuning

- 1 Select the desired band.



- 2 Press and hold either side of the PRST/DISC button.  
Release the button when the desired station is received.



#### PREVENTING ACCIDENTS!

When tuning in during driving, use the automatic tuning and the preset search function (page 13) instead of the manual tuning.

### Memorizing Stations Automatically

— BTM (Best Tuning Memory) Function

This function selects from the currently received band the stations with the strongest signals and memorizes them in order of their frequency.

- 1 Select the desired band.

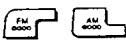


- 2 Press the button for more than two seconds.

- When there is no preset number indicated on the display window, stations will be stored on all preset number buttons on the currently selected band.
- When there is a preset number indicated on the display window, the unit will store stations on all preset number buttons from the one currently displayed.

For example, when you select FM1 and preset number 3 is displayed, the operation will start from preset number 3 on FM1, and will stop at preset number 10 on FM2.

# Memorizing Only the Desired Stations

- 1 Select the desired band.  

- 2 Tune in the station which you wish to store on the preset number button.
- 3 Keep the desired preset number button (1 to 10) pressed for about two seconds until you hear a beep tone.

The number of the pressed preset number button appears on the display window.

Up to 10 stations on each band (FM1, FM2 and AM) can be stored on the preset number buttons in order of your choice. Therefore, 20 stations can be memorized on FM. If you try to store another station on the same preset number button, the previously stored station will be erased.

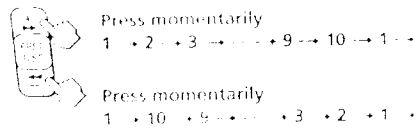
# Receiving the Memorized Stations

- 1 Select the desired band.  

- 2 Press momentarily the preset number button (1 to 10) on which the desired station is stored.

**Note**  
If you press the preset number button for more than two seconds, the currently received station will be memorized again. To receive the previously memorized station, make sure that the preset number button is pressed only momentarily.

Press either side of the PRST/DISC button momentarily to receive in order the stations stored in the memory (Preset Search Function).



# Station Memo Function

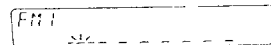
You can assign a name to each radio station and store it in memory. The name of the station currently tuned in can be displayed on the display window. The steps below describe radio operation.

# Storing the Station Names in the Memory of the Tuner

- 1 Tune in a station whose name you wish to register.



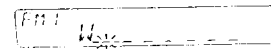
- 2 Press the  button for more than two seconds. Enter the name edit mode.



- 3 Press either the  or  button to select the desired characters.



- 4 Press the  button after locating the desired character.



The flashing part moves to the next space on the right. Repeat steps 3 and 4 to enter the entire title. Up to eight characters can be used per station.

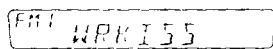
- Notes**
- If you press the SET button when the eighth character (rightmost right character) is flashing, the flashing part will go back to the first character (leftmost left character).
  - If you wish to put a blank space after a character, select .

continue to next page →

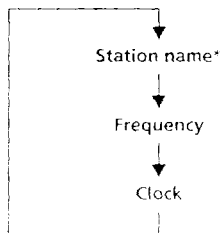
- 5 ② To continue to put titles onto the stations,
- press either side of the SEEK/AMS button momentarily to go to another station.
  - press the  or  button to select the next band.
- ③ To return to the normal radio reception mode,
- press the  button for more than two seconds.

## Displaying the Registered Names

Press the  button during radio reception.



Each time you press the  button during radio reception, the display on the display window changes as follows:



\* If the name of a station is not registered, "NO NAME" will appear on the display window.

## Changing a Registered Name

Tune in a station whose name you wish to change, and perform steps 2 to 5 on page 10 to enter the name edit mode.

## Erasing a Registered Name

- 14 1 Tune in any station.

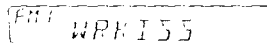
- 2 Press the  button for more than two seconds.  
Enter the name edit mode.
- 3 Press the  button while pressing the  button.
- 4 Press either the  or  button to select the name that you wish to erase.
- 5 Press the  button for more than two seconds.  
Repeat step 4 and step 5 if necessary.
- 6 Press the  button for more than two seconds.  
The unit returns to the normal radio reception mode.

*The alternative method to erase a name*  
You can erase a title by selecting eight "\_"s (under-bar) as described in step 3 of "Storing the Station Name in the Memory of the Tuner" (page 13).

## Searching for the Memorized Stations

— List up Function

- 1 Press the  button momentarily.



**Note**  
If the name of a station is registered, that name will be displayed. If the name of a station is not registered, the frequency of that station will be displayed. Refer to "Storing the Station Names in the Memory of the Tuner" for details.

- 2 Pressing the  button continuously will display in order the names of the stations on the currently received band. Once the station name or the frequency has been displayed for over five seconds, the list-up function will be cancelled.

*Turning off the Display*  
Press the  button again.

- 3 When you have found the desired station, press the PRST/DISC button to tune in the desired station.

## Other Functions

### Adjusting the Sound Characteristics

- 1 Select the item you want to adjust by pressing the  button repeatedly.

VOL (volume) → BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader) → VOL (volume)

- 2 Adjust the selected item by pressing the  or  button.

Adjust within three seconds after selecting.  
(After three seconds the button will again serve as volume control button.)

### Enjoying Bass and Treble even at Low Volume

— Loudness Function

Press the  button while pressing the  button. → “LOUD” will appear on the display.

Bass and treble will be reinforced.  
To cancel, press again.

### Muting the Sound Quickly

— Mute Function

Press the  button. → The “MUTE” indication flashes.

The sound is muted at once.  
To restore the previous volume level, press again.

*This function will be also cancelled when:*

*For  → MUTE button is pressed  
during a CD by pressing the  button during CD playback.*

### Muting the Beep Tone

Press the  button while pressing the  button.

To obtain the beep tone again, press these buttons once more.

### Changing the Illumination Color

Press the  button while pressing the  button.

You can choose the color between amber and green.

EN

Station Memo Function/Other Functions

## CD/MD Changer Operation

With the optional CD/MD changer(s) connected

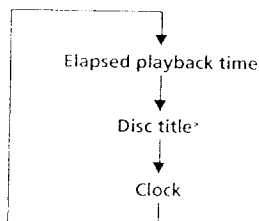
### Playing a CD/MD

Press the  button.

CD/MD playback starts.

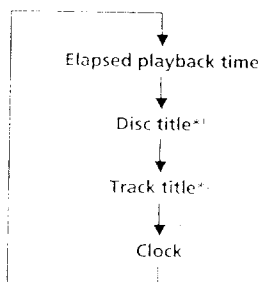
Each time you press the  button momentarily during CD/MD playback, the display on the display window changes as follows:

During CD playback:



\* If no title was recorded on the CD with a custom file function-equipped CD changer, "NO NAME" will appear on the display.

During MD playback:



\* If there is no prerecorded title for MD, "NO D.NAME" will appear on the display.

\*2 If track title is not prerecorded, "NO T.NAME" will be displayed.

If the title of MD is too long (more than nine characters), you can have it scrolled across the display window by pressing the  button.

### Displaying the Title of the Currently Played MD or Track Manually

Press the  button until the desired display appears on the display window.

If these data are not prerecorded on the currently played MD, "NO D.NAME" or "NO T.NAME" will appear for one second.

If the title is too long, you can scroll it across the display window by pressing the  button momentarily.

### Displaying the Recording Date of the Currently Selected MD

Press the  button for more than two seconds during MD playback.

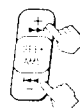
→ The recording date of the track will be displayed for about three seconds.

This applies only if these titles are prerecorded on the MD.

### Locating the Beginnings of the Tracks

— AMS (Automatic Music Sensor) Function

During playback, press either side of the SEEK/AMS button the number of times you wish to skip the tracks.



To locate the succeeding tracks

To locate the previous tracks

### Locating the Desired Part of a Track

— Manual Search Function

During playback, press and hold either side of the PRST/DISC button. Release the button when you have found the desired part.



To forward

To reverse

## Searching the Desired Disc

### — Disc scan Function

Press the  button during playback.  
→ “D.SCAN” appears on the display.

The first 10 seconds of the first track on all discs of currently used source (CD or MD) are played.

Pressing the button again cancels this function.

#### Note

The Disc Scan Function will also be cancelled when the unit is fitted off or when the ignition switch of car is turned to OFF for more than eight seconds.

## Selecting a Desired Disc

### — Direct Disc Selection Function

Press the button whose number corresponds with the desired disc number for more than one second.

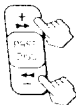
The desired disc in the currently selected changer playback start.

For CD changers,  -- 

For MD changers,  -- 

## Changing Discs

During playback, press either side of the PRST/DISC button momentarily.



To advance to the next disc

To return to the previous disc

## Selecting CD/MD Changers

(with several CD/MD changers connected)

Press the  button during CD/MD playback.

Each time you press, another CD/MD changer will be selected.

## Searching for the Desired Track

### — Intro Scan Function

Press the  button during playback.  
→ “INTRO” appears on the display.

The first 10 seconds of all the tracks on the currently selected disc are played in order. After the first disc is over, the next disc is played. When two or more CD/MD changers are connected, after the last disc is played, CD/MD playback moves on to the next CD/MD changer.

When you find the desired track, press again. The unit returns to the normal CD/MD playback mode.

#### Note

When both CD changer(s) and MD changer(s) are connected, they will function separately as an MD or as a CD changer, respectively.

## Playing Repeatedly

### — Repeat Play Functions

**Playing the currently selected track repeatedly — Track repeat**

Press the  button during CD/MD playback to get the “REP 1” indication.

**Playing the currently selected disc repeatedly — Disc repeat**

Press the  button during CD/MD playback to get the “REP 2” indication.

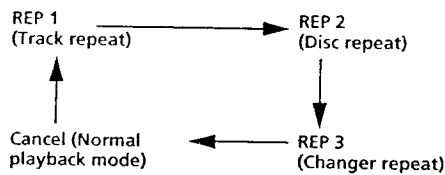
When the last track on the currently selected disc is over, CD/MD playback is repeated from the beginning of that disc.

**Playing the discs in the currently selected CD/MD changer repeatedly — Changer repeat (when CD/MD changer(s) is(are) connected)**

Press the  button during CD/MD playback to get the “REP 3” indication.

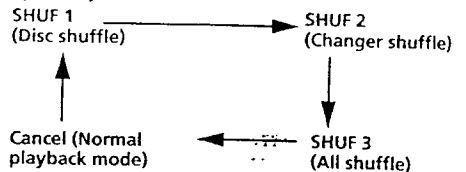
When the last disc in the currently selected CD/MD changer has been played, CD/MD playback will be repeated from the first disc in this changer.

The function of the **[REPEAT 2]** button changes cyclically as follows:



**Note**  
When both CD changer(s) and MD changer(s) are connected, they will function separately as an MD or as a CD changer, respectively.

The function of the **[SHUFFLE 3]** button changes cyclically as follows:



If you press the **[STOP 1]** button during shuffle play, the first 10 seconds of all tracks will be played randomly.

**Note**  
When both CD changer(s) and MD changer(s) are connected, they will function separately as an MD or as a CD changer, respectively.

## Playing Tracks Randomly

### — Shuffle Play Functions

#### Playing the tracks on the currently selected disc randomly

##### — Disc shuffle play

Press the **[SHUFFLE 1]** button during CD/MD playback to get the "SHUF 1" indication.

All tracks on the currently selected disc are played in random order. After each track has been played once, shuffle play will continue with the next disc.

#### Playing each track on each disc in the currently selected CD/MD changer randomly

##### — Changer shuffle play

Press the **[SHUFFLE 2]** button during CD/MD playback to get the "SHUF 2" indication.

All tracks on each disc in the currently selected disc changer are played in random order.

#### Playing each track on each disc in all connected CD/MD changers randomly

##### — All shuffle play (when CD/MD changer(s) is(are) connected)

Press the **[SHUFFLE 3]** button during CD/MD playback to get the "SHUF 3" indication.

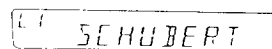
All tracks on each disc in each CD/MD changer connected are played in random order.

## Searching for a Desired Disc by Title

### — List up Function (with separately available MD changer(s) or CD changer(s) with custom file function connected)

This function can be performed after discs have been assigned a custom title. For more information on disc titles, refer to page 19.

1 Press the **[LIST UP]** button momentarily.



The name assigned to the disc currently playing will appear on the display.

**Note**  
This function may not work when (a) changer(s) without list up feature is(are) connected.

2 Pressing the **[LIST UP]** button continuously will display in order the titles of the discs in the currently selected changer. Once a disc name has been displayed for over five seconds, the display window returns to its normal display.

**Turning off the Display**  
Press the **[DISP]** button again.

#### Notes

- The track titles cannot be displayed (during MD playback).
- If there are no discs in the magazine, "NO DISC" will appear on the display.
- If a disc has not been assigned a custom name, "\*\*\*\*\*" will appear on the display.

- If the disc information has not been read in by the unit, "NOT READ" will appear on the display. If the disc information has not been loaded into the unit, "NOT READ" will appear on the display. To execute loading, first push the PRST/DISC button, then choose the disc that has not been loaded.
- The information will be displayed only in capital letters. There are also some letters which cannot be displayed (during MD playback)

**3** When you have found the desired disc, press the PRST/DISC button to playback the disc (Direct Search Function).

**Note**

You can still execute the direct search function even if the "\*\*\*\*\*" message appears on the display (unnamed disc).

## CD Custom File Function

With the optional CD changer(s) connected

When (a) CD changer(s) with custom file function\*<sup>1</sup> is (are) connected, you can display the customized titles (Disc Memo Function) and play selected tracks (Bank Function) on the discs.

These settings are stored in the memory of the CD changer. Therefore, even if you take a custom-filed disc out of the CD changer, you can still use the same custom file function the next time you play that disc in the same CD changer. (You can register the customized titles and the PLAY/SKIP settings on up to 110 discs\*<sup>2</sup> per CD changer.)

\*<sup>1</sup> If your system has several CD changers connected, you can play that disc in another CD changer and can still use the same custom file function, provided that the CD changers are inter-connected with the BUS cables.

\*<sup>2</sup> If you try to register more than 110 discs, the unit will display the "FULL" indication and will not accept the command for custom -filing. In this case, you will have to erase other discs from the CD changer memory before you enter the new ones.

## Putting Your Personalized Titles onto the CDs

— Disc Memo Function

- 1 Play the disc that you wish to title (page 16).
- 2 Press the  button for more than two seconds.



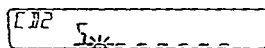
Enter the name edit mode.

- 3 Press the  or  button to select the desired characters.



continue to next page •

- 4 Press the  button after locating the desired character.



The flashing part moves to the next space on the right. Repeat steps 3 and 4 to enter the entire title. Up to eight characters can be used per disc.

#### Notes

- If you press the SEL button when the eighth character (farthest right character) is flashing, the flashing part goes back to the first character (farthest left character).
- If you wish to put a blank space after a character, select " " (under-bar).

- 5 ① To continue to put the titles onto the discs,

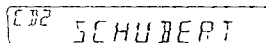
press either side of the PRST/DISC button momentarily to another disc.

- ② To return to the normal CD playback mode,

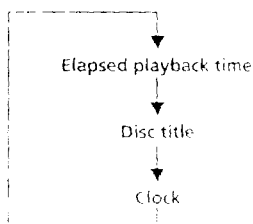
- press the  button for more than two seconds.
- press the  button to select the next CD changer (when two or more CD changers are connected).

## Displaying the Registered Titles — Disc Memo Function

Press the  button during CD playback.

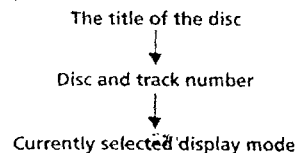


Each time you press the  button during CD playback, the display on the display window changes as follows:



#### Title display modes

While loading the discs, whatever display mode the unit is in, the indication on the display window automatically changes as follows:



## Changing a Registered Title — Disc Memo Function

Play the disc whose title you wish to change, and perform steps 2 to 5 on page 19 to enter the name edit mode.

## Erasing a Registered Title — Disc Memo Function

— Disc Memo Function

- 1 Select the CD changer and play any disc.
- 2 Press the  button for more than two seconds.  
Enter the name edit mode.
- 3 Press the  button while pressing the  button.
- 4 Press the  or  button to select the title that you wish to erase.
- 5 Press the  button for more than two seconds.  
Now, the title and the PLAY/SKIP settings of the bank function are erased.  
Repeat step 4 and step 5 if necessary.
- 6 Press the  button for more than two seconds.  
The unit returns to the normal CD playback mode.

#### The alternative method to erase a title

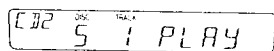
You can erase with the " " (under-bar) character. Press the " " (under-bar) button on the display window to erase the title.

## Setting the Play and Skip Modes on the CDs

— Bank Function

- 1 Play the disc to which you wish to set these modes.
- 2 Press the  button for more than two seconds.  
Enter name edit mode.  
*See page 19 for details about registering a title. If the title has already been registered, go to step 3.*

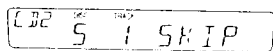
- 3 Press the  button momentarily.  
Enter the PLAY/SKIP edit mode.



### Note

When the title is not registered, you cannot enter the PLAY/SKIP edit mode even if you press the LIST button.

- 4 Press either side of the SEEK/AMS button to select the track number you wish to skip and press the  button.



The indication changes from "PLAY" to "SKIP". If you wish to return to "PLAY", press the SEL button again.  
Repeat the operation in this step to set either the "PLAY" or "SKIP" mode on all the tracks.

### Note

You can set the "SKIP" mode only onto up to 24 tracks. If a disc has more than 24 tracks, you will not be able to set the "SKIP" mode on the track after the 24th track.

- 5 Press the  button for more than two seconds.  
The unit returns to the normal CD playback mode.

## Playing Selected Tracks on the CDs — Bank Function

Press the  button momentarily.  
→ "BANK" appears on the display.



The unit starts playing the tracks with "PLAY" settings which have been set by the PLAY/SKIP edit mode.

To cancel, press it again.

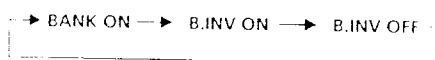
### Playing the tracks with "SKIP" settings.

Press the  button several times until you get the "B.INV ON" indication.

The unit starts playing the tracks with "SKIP" settings which have been set by the PLAY/SKIP edit mode.

To go back to the normal playing mode, press the  button several times until you get the "B.INV OFF" indication.

Each time you press the  button, the display on the display window changes as follows:



### Note

Even when you play a disc with the PLAY/SKIP settings, if the "BANK" indication has not appeared on the display window, the disc will not be played according to the settings.

EN  
CD Custom File Function

## Maintenance

### Fuse Replacement

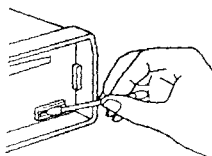
When replacing the fuse, be sure to use one with the correct amperage which is stated on the fuse case. Never use a fuse whose amperage rating exceeds the one supplied to the unit as this could cause a malfunction of the unit.

### Warning

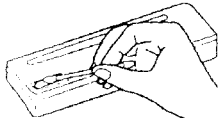
Use a fuse with the specified amperage. Use of a fuse with higher amperage may cause serious damage.

### Cleaning the Connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. In order to prevent this, open the front panel by pressing the RELEASE button, then detach it and clean with a cotton swab which was dipped in alcohol. Do not apply too much force. Otherwise, the connector may get damaged.



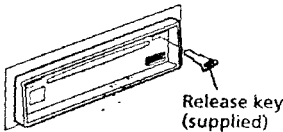
Main unit



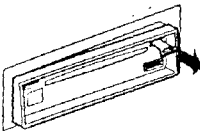
Back of the front panel

## Dismounting the Unit

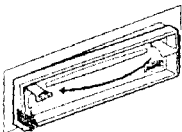
1



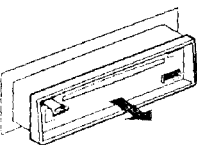
2



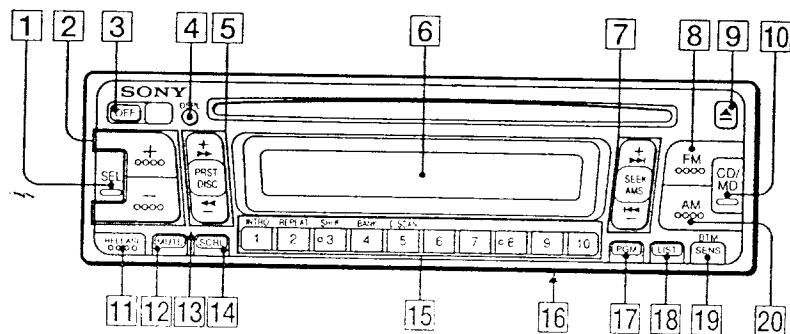
3



4



## Location of Controls



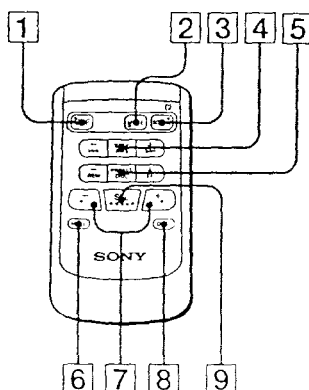
Refer to the pages in ● for details.

- 1 SEL (control mode select/character set) button ●●●●●●●●●●
- 2 (volume/bass/treble/balance/fader control) button ●●●●●●●●●●
- 3 OFF button ●●●●
- 4 DSPL (display mode change/time set) button ●●●●
- 5 PRST/DISC (preset search/disc change) button ●●●●●●
- 6 Display window
- 7 SEEK/AMS (automatic tuning/Automatic Music Sensor) button ●●●●
- 8 FM (radio on/band select) button ●●●●
- 9 (eject) button ●●
- 10 CD/MD (CD/MD play•changer select) button ●●●●●●
- 11 RELEASE (front panel release) button ●●
- 12 MUTE button ●
- 13 Reset button (located on the front side of the unit hidden by the front panel) ●
- 14 SCRL (scroll) button ●
- 15 During radio reception:  
Preset number buttons ●
- During CD/MD playback:  
● INTRO (intro scan) button ●●●●
- REPEAT (repeat play) button ●●●
- SHUF (shuffle play) button ●●
- BANK button ●
- D.SCAN (disc scan) button ●●●●
- Direct disc selection buttons ●
- 16 POWER SELECT switch (located on the bottom of the unit)  
See "POWER SELECT Switch" in the installation/Connections manual.
- 17 PGM (program) button ●●●●●
- 18 LIST (list up) button ●●●●●●●
- 19 SENS/BTM (sensitivity adjust/Best Tuning Memory function) button ●
- 20 AM (radio on/band select) button ●●●●●



## Location of Controls

**Optional the Wireless Remote Commander (RM-X40)**



**Buttons with the same function as those as those on the master unit**

- [1] OFF button
- [4] SEEK/AMS button
- [5] PRESET/DISC button  
*You cannot do the manual search and manual tuning with the remote commander.*
- [6] MUTE button
- [7] button
- [8] DSPL button
- [9] SEL button

**Different function buttons**

- [2] MODE button  
During CD/MD playback:  
Selects CD/MD changers when several CD/MD changers are connected.  
During radio reception:  
Changes preset groups within band received:  
FM1 ↔ FM2
- [3] SOURCE button  
Press to select program sources.  
Each time the button is pressed, the program source mode changes as follows:  
FM → AM → CD → MD

When the POWER SELECT switch is set to the **ⓑ** position, the unit cannot be operated with the wireless remote commander unless the CD/MD or TUNER button on the unit is pressed or a CD is inserted to activate the unit first.

# Specifications

## AUDIO POWER SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

12 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1 % total harmonic distortion.

## Other Specifications

### CD player section

|                        |                                   |
|------------------------|-----------------------------------|
| System                 | Compact disc digital audio system |
| Signal-to-noise ratio  | 90 dB                             |
| Frequency response     | 10 – 20,000 Hz                    |
| Wow and flutter        | Below measurable limit            |
| Laser Diode Properties |                                   |
| Material               | GaAlAs                            |
| Wavelength             | 780 nm                            |
| Emission Duration      | Continuous                        |
| Laser output power     | Less than 44.6 $\mu$ W*           |

\* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

### Tuner section

#### FM

|                              |                                 |
|------------------------------|---------------------------------|
| Tuning range                 | 87.5 – 107.9 MHz                |
| Antenna terminal             | External antenna connector      |
| Intermediate frequency       | 10.7 MHz                        |
| Usable sensitivity           | 8 dBf                           |
| Selectivity                  | 75 dB at 400 kHz                |
| Signal-to-noise ratio        | 65 dB (stereo),<br>68 dB (mono) |
| Harmonic distortion at 1 kHz | 0.5 % (stereo),<br>0.3 % (mono) |
| Separation                   | 35 dB at 1 kHz                  |
| Frequency response           | 30 – 15,000 Hz                  |
| Capture ratio                | 2 dB                            |

#### AM

|                        |                            |
|------------------------|----------------------------|
| Tuning range           | 530 – 1,710 kHz            |
| Antenna terminal       | External antenna connector |
| Intermediate frequency | 10.7 MHz / 450 kHz         |
| Sensitivity            | 30 $\mu$ V                 |

### Power amplifier section

|                      |                                           |
|----------------------|-------------------------------------------|
| Outputs              | Speaker outputs<br>(bare seal connectors) |
| Speaker impedance    | 4 – 8 ohms                                |
| Maximum power output | 90 W $\times$ 4 (at 4 ohms)               |

### General

|                      |                                                                                                                                                                                                                                     |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output lead          | Power antenna relay control lead<br>Power amplifier control lead                                                                                                                                                                    |
| Tone controls        | Bass $\pm$ 8 dB at 100 Hz<br>Treble $\pm$ 8 dB at 10 kHz                                                                                                                                                                            |
| Power requirements   | 12 V DC car battery (negative ground)                                                                                                                                                                                               |
| Dimensions           | Approx. 188 $\times$ 50 $\times$ 177 mm<br>(7 $\frac{1}{2}$ $\times$ 2 $\times$ 7 in.)<br>(w/h/d)                                                                                                                                   |
| Mounting dimension   | Approx. 178 $\times$ 50 $\times$ 154 mm<br>(7 $\frac{1}{8}$ $\times$ 2 $\times$ 6 $\frac{1}{8}$ in.)<br>(w/h/d)                                                                                                                     |
| Mass                 | Approx. 1.5 kg (3 lb. 4.9 oz.)                                                                                                                                                                                                      |
| Supplied accessories | Rotary commander (1)<br>Power connecting cord (1)<br>Mounting hardware (1 set)<br>Front panel case (1)                                                                                                                              |
| Optional accessories | Wireless remote commander RM-X40<br>BUS cable (supplied with an RCA pin cord)<br>RC-61 (1 m), RC-62 (2 m)<br>RCA pin cord<br>RC-63 (1 m), RC-64 (2 m),<br>RC-65 (5 m)<br>Cleaning cloth XP-CD1<br>Compact disc single adapter CSA-8 |
| Optional equipment   | CD changer<br>CDX-71 (10 discs),<br>CDX-91 (10 discs),<br>CDX-To0 (6 discs)<br>MD changer MDX 40<br>Source selector XA-U20,<br>XA-U40                                                                                               |

Design and specifications are subject to change without notice.

001-1-1

## Troubleshooting Guide

The following check will assist in the correction of most problems which you may encounter with your unit.  
Before going through the check list below, refer to the connection and operating procedures.

### General

| Problem                                          | Cause/Solution                                                                                                                                                                                                                                           |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No sound                                         | <ul style="list-style-type: none"><li>• Adjust the volume with the  button.</li><li>• Set the fader control to the center position on the 2-speaker system.</li></ul> |
| The contents of the memory has been erased.      | <ul style="list-style-type: none"><li>• The power cord or battery has been disconnected.</li><li>• the reset button has been pressed.<br/>→ Store again into the memory.</li></ul>                                                                       |
| Indications do not appear on the display window. | Remove the front panel and clean the connectors. See "Cleaning the Connectors" of "Maintenance" for details.                                                                                                                                             |

### CD/MD playback

| Problem                                | Cause/Solution                                                                                                                                                        |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A CD cannot be loaded.                 | <ul style="list-style-type: none"><li>• Another CD is already loaded.</li><li>• The CD is forcibly inserted upside down or the wrong way round</li></ul>              |
| Play does not begin.                   | Defective disc (MD) or dusty (CD).                                                                                                                                    |
| A CD is automatically ejected.         | The ambient temperature is more than 50°C.                                                                                                                            |
| The operation buttons do not function. | Press the reset button.                                                                                                                                               |
| The sound skips due to vibration.      | <ul style="list-style-type: none"><li>• The unit is installed at an angle of more than 20°.</li><li>• The unit is not installed to a sturdy part of the car</li></ul> |

### Radio reception

| Problem                           | Cause/Solution                                                                                                                                                                                                                              |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preset tuning is not possible.    | <ul style="list-style-type: none"><li>• Memorize the correct frequency.</li><li>• The broadcast is too weak.</li></ul>                                                                                                                      |
| Automatic tuning is not possible. | The broadcast is too weak. → Use the manual tuning.                                                                                                                                                                                         |
| The "ST" indication flashes.      | <ul style="list-style-type: none"><li>• Tune in precisely.</li><li>• The broadcast is too weak<br/>→ Press the  button to enter the MONO mode.</li></ul> |

**Error displays (with the optional CD/MD changer(s) connected)**

The following indications will flash for about five seconds and an alarm sound will be heard.

| Display  | Cause                                                         | Solution                                                    |
|----------|---------------------------------------------------------------|-------------------------------------------------------------|
| NO MAG   | The disc magazine is not inserted in the CD/MD changer.       | Insert the disc magazine with discs into the CD/MD changer. |
| NO DISC  | No disc is inserted in the disc magazine.                     | Take out the magazine and insert the discs.                 |
| ERROR *1 | The fourth*2 CD is dirty or inserted upside down.             | Clean or insert the CD correctly.                           |
|          | The fourth*2 MD is not playback because of some problem.      | Insert the another MD.                                      |
| BLANK *1 | No tracks have been recorded on the fourth*2 MD.              | Playback an MD with recorded tracks on it.                  |
| RESET    | The CD/MD changer cannot be operated because of some problem. | Press the reset button of the unit.                         |

\*1 When an error occurs during playback of an MD or CD, the number of the MD or CD will not appear on the display.  
\*2 The number of the disc in the magazine causing the error will appear on the display (MD: 1 - 4, CD: 1 - 10).

If the above-mentioned solutions do not help to improve the situation, consult your nearest Sony dealer.



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